

*Amendments to the Specification and Claims*

Paragraphs [0042] through [0046] and [0049] through [0053] of the present specification have been amended to correct an obvious typographical error. In particular, the specification has been amended to replace "polysorbate 20" with "polysorbate 80," to correct the spelling of the nonionic surfactant. The amendment is fully supported by the specification, e.g., at paragraphs [57] through [62], and paragraphs [66] through [69]. In addition, paragraphs [0045] and [0052] have been amended to correct a typographical error with respect to Comparative Samples 2C and 3C, respectively.

The claims have been amended to more particularly point out and distinctly claim the present invention. In particular, claims 1, 39, 41, and 45 have been amended to recite a ratio of urea to coenzyme Q10 of from about 6:1 to about 10:1 (wt./wt.). In addition, claims 10 and 11 have been amended to recite a urea to coenzyme Q10 ratios of about 9:1 and about 10:1, respectively. The claim amendments are fully supported by the specification, for example, at paragraph [0018], and paragraphs [39] through [69].

No new matter has been added by way of these amendments. Separate documents setting forth (a) the precise changes to the claims, and (b) a full text of all of the pending claims, as amended, are enclosed herewith.

*Examiner Interview*

Applicants wish to thank Examiner Yu for the courtesy of a telephone interview, held on October 15, 2002, in which Salim Hasan, Kristen Harrell and Ken Spina were present. An agreement was not reached. Examiner Yu indicated that the U.S. Patent and Trademark Office would record the substance of the interview.

*Discussion of Office Action*

With regard to the obviousness rejections, the Office Action asserts that the evidence of unexpected results with respect to the combination of urea and coenzyme Q10 is not commensurate in scope with the claims. Although applicants disagree with the rejections, as indicated above, the claims have been amended to recite a urea to coenzyme Q10 ratio in the composition of from about 6:1 to about 10:1 (wt./wt.). The claims were amended solely in an effort to advance the prosecution of the application, and not in acquiescence of the rejections.

The specification fully supports the surprising and unexpected synergistic effect of combining urea and coenzyme Q10 throughout the entire range recited in the amended claims. For example, the specification demonstrates actual examples of compositions comprising a synergistic combination of urea and coenzyme Q10 in a ratio of 6:1, e.g., in paragraph [0018] and Examples 5 and 6. In addition, the specification provides actual

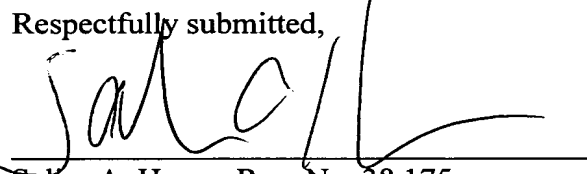
examples of compositions comprising a synergistic combination of urea and coenzyme Q10 in ratios of 9:1 and 10:1, e.g., in Examples 1 (9:1), and 2-4 and 7-11 (10:1). Indeed, the specification provides actual examples, which support the ratio of urea to coenzyme Q10 as recited in the amended claims. As such, the amended claims clearly are commensurate in scope with what is taught by the specification.

The cited references, alone or in combination, do not teach or suggest combining urea and coenzyme Q10 in any ratio whatsoever, let alone in the ratio recited in the amended claims. Fänger et al. does not teach or suggest combining urea and coenzyme Q10 in any ratio whatsoever, much less in a ratio of from about 6:1 to about 10:1 (wt./wt.), as recited in the amended claims. Likewise, Hoppe et al. and Raab do not teach or suggest combining urea and coenzyme Q10 in any way, and there is no suggestion in any of the cited references that such a combination would produce a synergistic benefit, as Applicants have discovered. In short, there is nothing in the teachings of the cited references that discloses or reasonably suggests the invention recited in the amended claims. As such, the pending claims are not obvious over the cited references, and the rejections should be withdrawn.

*Conclusion*

The application is considered in good and proper form for allowance, and the Examiner is respectfully requested to pass this application to issue. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,



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**RESPONSE UNDER 37 CFR 1.116  
EXPEDITED PROCEDURE  
EXAMINING GROUP 1617**

**PATENT**  
Attorney Docket No. 210556

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

Ghosh et al.

Application No. 09/851,882

Filed: May 9, 2001

Art Unit: 1617

Examiner: G. Yu

For: COSMETIC COMPOSITION WITH  
IMPROVED SKIN  
MOISTURIZING PROPERTIES

**AMENDMENTS TO SPECIFICATION AND CLAIMS MADE IN  
RESPONSE TO OFFICE ACTION DATED MAY 16, 2002**

*(Deletions are indicated by bracketed text,  
while additions are indicated by underlining)*

**IN THE SPECIFICATION:**

[0042] This example demonstrates the immediate skin moisturizing properties of a synergistic combination of coenzyme Q10 and urea. Three samples (Sample 2A, and Comparative Samples 2B and 2C) were prepared and evaluated. Sample 2A contains a synergistic combination of coenzyme Q10 and urea. Comparative Sample 2B contains coenzyme Q10 in the absence of urea. Comparative Sample 2C contains urea in the absence of coenzyme Q10. Each sample was prepared as an aqueous dispersion containing polysorbate [20] 80 (a nonionic surfactant) and phenoxyethanol (a preservative/antimicrobial agent).

[0043] Sample 2A was prepared by dissolving urea and coenzyme Q10 in a standard aqueous polysorbate [20] 80 solution, diluting the resulting solution with water to form a dispersion of urea and coenzyme Q10, and adding 2-phenoxyethanol. The resulting

dispersion contained the following components, shown in percent by weight relative to the overall weight of the composition: urea (0.5 wt.%); coenzyme Q10 (0.05 wt.%); polysorbate [20] 80 (0.25 wt.%); 2-phenoxyethanol (0.6 wt.%) and water (q.s.).

[0044] Comparative Sample 2B was prepared using the same procedure used in the preparation of Sample 2A, except that urea was not included in the composition. Comparative Sample 2B contained the following components, shown in percent by weight relative to the overall weight of the composition: coenzyme Q10 (0.05 wt.%); polysorbate [20] 80 (0.25 wt.%); 2-phenoxyethanol (0.6 wt.%) and water (q.s.).

[0045] Comparative Sample 2C was prepared using the same procedure used in the preparation of Sample 2A, except that coenzyme Q10 was not included in the composition. Comparative Sample [2B] 2C contained the following components, shown in percent by weight relative to the overall weight of the composition: urea (0.5 wt.%); polysorbate [20] 80 (0.25 wt.%); 2-phenoxyethanol (0.6 wt.%) and water (q.s.).

[0046] Two control samples (Water Blank and Untreated Blank) also were evaluated. The Water Blank contains only water without additional ingredients. The Untreated Blank is a solution of polysorbate [20] 80 (0.25 wt.%) and 2-phenoxyethanol (0.6 wt.%) in water (q.s.).

[0049] This example demonstrates the cumulative skin moisturizing properties of a synergistic combination of coenzyme Q10 and urea. Three samples (Sample 3A, and Comparative Samples 3B and 3C) were prepared and evaluated. Sample 3A contains a synergistic combination of coenzyme Q10 and urea. Comparative Sample 3B contains coenzyme Q10 in the absence of urea. Comparative Sample 3C contains urea in the absence of coenzyme Q10. Each sample was prepared as an aqueous dispersion containing polysorbate [20] 80 (a nonionic surfactant) and phenoxyethanol (a preservative/antimicrobial agent).

[0050] Sample 3A was prepared by dissolving urea and coenzyme Q10 in a standard aqueous polysorbate [20] 80 solution, diluting the resulting solution with water to form a

dispersion of urea and coenzyme Q10, and adding 2-phenoxyethanol. The resulting dispersion contained the following components, shown in percent by weight relative to the overall weight of the composition: urea (0.5 wt.%); coenzyme Q10 (0.05 wt.%); polysorbate [20] 80 (0.25 wt.%); 2-phenoxyethanol (0.6 wt.%) and water (q.s.).

[0051] Comparative Sample 3B was prepared using the same procedure used in the preparation of Sample 3A, except that urea was not included in the composition. Comparative Sample 3B contained the following components, shown in percent by weight relative to the overall weight of the composition: coenzyme Q10 (0.05 wt.%); polysorbate [20] 80 (0.25 wt.%); 2-phenoxyethanol (0.6 wt.%) and water (q.s.).

[0052] Comparative Sample 3C was prepared using the same procedure used in the preparation of Sample 3A, except that coenzyme Q10 was not included in the composition. Comparative Sample [3B] 3C contained the following components, shown in percent by weight relative to the overall weight of the composition: urea (0.5 wt.%); polysorbate [20] 80 (0.25 wt.%); 2-phenoxyethanol (0.6 wt.%) and water (q.s.).

[0053] Two control samples (Water Blank and Untreated Blank) also were evaluated. The Water Blank contains only water without additional ingredients. The Untreated Blank is a solution of polysorbate [20] 80 (0.25 wt.%) and 2-phenoxyethanol (0.6 wt.%) in water (q.s.).

*IN THE CLAIMS:*

1. (Amended) A cosmetic composition comprising urea and coenzyme Q10, wherein the ratio of urea to coenzyme Q10 in the composition is from about [1:5] 6:1 to about [20:1] 10:1 (wt./wt.).

10. (Amended) The composition of claim 1, wherein the ratio of urea to coenzyme Q10 in the composition is [at least] about [3:1] 9:1 (wt./wt.).

11. (Amended) The composition of claim 1, wherein the ratio of urea to coenzyme Q10 in the composition is [at least] about [6:1] 10:1 (wt./wt.).

39. (Amended) A cosmetic composition comprising:

- (a) urea, which is present in an amount of from about 0.1% to about 10% by weight of the composition;
- (b) coenzyme Q10, which is present in an amount of from about 0.001% to about 5% by weight of the composition, wherein the ratio of urea to coenzyme Q10 in the composition is from about 6:1 to about 10:1 (wt./wt.); and, optionally, one or more of the following ingredients:

- (i) an emulsifier;
- (ii) a thickener;
- (iii) a preservative;
- (iv) a sunscreen;
- (v) a chemical neutralizer;
- (vi) an odor-masking agent;
- (vii) a solid emollient;
- (viii) a soothing additive;
- (ix) a moisturizing additive; and
- (x) an antioxidant.

41. (Amended) A cosmetic composition comprising an emulsion, the emulsion comprising:

- (a) an aqueous phase;

- (b) an oil phase;
- (c) urea, which is present in an amount of from about 0.1% to about 10% by weight of the composition;
- (d) coenzyme Q10, which is present in an amount of from about 0.001% to about 5% by weight of the composition, wherein the ratio of urea to coenzyme Q10 in the composition is from about 6:1 to about 10:1 (wt./wt.); and, optionally, one or more of the following ingredients:
  - (i) an emulsifier;
  - (ii) a thickener;
  - (iii) a preservative;
  - (iv) a sunscreen;
  - (v) a chemical neutralizer;
  - (vi) an odor-masking agent;
  - (vii) a solid emollient;
  - (viii) a soothing additive;
  - (ix) a moisturizing additive; and
  - (x) an antioxidant.

45. (Amended) A method of improving the after-feel of a cosmetic composition when the composition is applied to the skin, the method comprising including in the composition an after-feel enhancing-effective amount of coenzyme Q10 and urea, wherein the ratio of urea to coenzyme Q10 in the composition is from about [1:5] 6:1 to about [20:1] 10:1 (wt./wt.).